

REMARKS

The specification has been amended on page 9 in order to delete references to colors in Figure 6A-6C. The specification also has been amended on page 26 to correct a typographical error in that there are 8 ELRs in the vertebrate Delta protein, as evidenced by the recitation of the approximate positions of each of the 8 ELRs later in the same paragraph and on page 69, lines 15 stating that the C-Delta-1 protein contains 8 EGF-like repeats. Further, the specification has been amended on pages 10 and 76 in order to insert a missing sequence identifier number.

The specification also has been amended to insert the second substitute Sequence Listing submitted herewith. The undersigned hereby states that the content of the paper and computer readable copies of the second substitute Sequence Listing, submitted in accordance with 37 C.F.R. §§ 1.821(c) and (e), respectively, are the same. The undersigned further states that the second substitute Sequence Listing contains no new matter. Applicants respectfully request that the second substitute Sequence Listing be entered into the specification and file history of this application.

Claims 29-32, 60, 61, 99-105, 107-110, 112-114-126, 128-136, 138, 139, 141-146 and 152-169 will be pending upon entry of this amendment. Claims 106, 111, 127 and 140 have been canceled herein without prejudice. Applicants reserve the right to pursue the subject matter of these claims in a related application.

Claims 29, 30, 60, 61, 99, 102, 105, 107-110, 113, 114, 115, 116, 124, 126, 128, 129, 131-136, 138, 139, 146, 156, 157 and 166 have been amended to clarify the claimed invention, and new claims 167-169 have been added. Claims 29, 30, 60, 61, 107-109, 113, 114, 129, 131-136, 138, and 166 have been amended in accordance with the Examiner's suggestion to remove reference to "antisense sequence" since such reference is redundant. Since the amendment is to remove a redundant term, the scope of the claims is not changed in view of this amendment. Claims 114, 129, 156 and 157 have been amended

to remove the terms “epidermal growth factor-like repeat region” and “transmembrane domain” and have been amended to add the terms “epidermal growth factor-like repeat 1” and “epidermal growth factor-like repeat 2.” Support for this amendment is found in the specification at page 6, lines 12-19; page 25, lines 24-30; page 36, lines 25-35 and page 37, lines 1-14.

Claims 99, 126 and 146 have been amended to delete reference to SEQ ID NO:23. Claims 99, 105, 110, 126, 128, 139 and 146 have been amended to delete reference to SEQ ID NOS:67-69 and 79. Support for this amendment is found in the specification at page 26, lines 17-25, Figure 12B and Figure 14. Claim 115 has been amended to recite that the fragment further comprises the membrane-associated region of the vertebrate Delta protein. Support for this amendment is found at page 36, lines 25-35. Claim 116 has been amended to recite epidermal growth factor like-repeat 1 or epidermal growth factor-like repeat 2, and to correct an editorial error. Support for the amendment to claim 116 is found in the specification at page 6, lines 12-19; page 25, lines 24-30; page 36, lines 25-35 and page 37, lines 1-14. In order to avoid having a multiply dependent claim depend from a multiply dependent claim, claims 102 and 124 have been amended to delete the dependency upon multiply dependent claims 31 and 123, respectively, and new claims 168 and 169 have been added.

New claim 167 is supported on page 25, line 26 and page 36, lines 25-32. New claims 168 and 169 are supported on page 31, lines 13-15; page 60, lines 19-20; page 64, lines 15-18.

No new matter is added by these amendments to the specification and claims.

1. Election/Restrictions

Claims 114-120, 129, 156 and 157 are objected to for containing non-elected subject matter. In particular, according to the Examiner, the claims are objected to for

referring to a fragment comprising the transmembrane domain and the EGF-like repeat domain. In response, Applicants first thank the Examiner for additionally examining the intracellular domain. Second, Applicants note that claims 114, 129, 156 and 157 have been amended to remove reference to the epidermal growth factor-like repeat region and the transmembrane domain. Claims 114, 129, 156 and 157 have also been amended to add the terms “epidermal growth factor-like repeat 1” and “epidermal growth factor-like repeat 2.” Applicants note that SEQ ID NO:65, which is the elected species, contains the first, second and a part of the third epidermal growth factor-like repeats; thus the inclusion of the terms “epidermal growth factor-like repeat 1” and “epidermal growth factor-like repeat 2” does not cause the subject matter of the claims to fall outside the elected species. With regard to claims 115-120, the subject matter of these claims does not fall outside the elected species since claim 114, the claim from which claims 115-120 depend, does not fall outside the elected species.

2. Drawings and Sequence Listing

The Drawings have been objected to in that, according to the Examiner, the description of Figure 6 refers to color in the figure and Applicants have not filed the required Petition under 37 C.F.R. § 1.84(a)(2). In response, Applicants note that the submitted Formal Drawing are all in black and white and that the description of Figure 6 has been amended to delete any reference to color in the figure.

The Examiner also objects to the lack of a sequence identifier in the description of Figure 11. In response, Applicants have amended the description of Figure 11 on page 10 to include the sequence identifier and that the omitted sequence has now been included in the second substitute Sequence Listing submitted herewith. A similar amendment to insert a sequence identifier has been made on page 76.

3. Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 29, 30, 60, 61, 107, 108, 109, 113, 114, 129, 131-136, 138 and 166 and dependent claims 31, 32, 99-106, 110-112, 115-128, 130, 139-146 and 164-165 are rejected under 35 U.S.C. § 112, second paragraph, as being, allegedly, indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention. According to the Examiner, the claims are confusing because they recite “a nucleic acid or its complement” selected from “a nucleic acid sequence or its antisense sequence” and it is not clear whether the antisense sequence is meant to be distinguished from the complement.

In response, Applicants have amended the claims to remove the redundant language in accordance with the Examiner’s suggested draft claim, and thus respectfully submit that the rejection has been obviated.

With regard to claim 166, Applicants have amended claim 166 to delete reference to “antisense sequence to SEQ ID NO:24”.

In view of the foregoing, Applicants respectfully request withdrawal of the Section 112, second paragraph, rejection.

4. Examiner’s Comments

Applicants acknowledge the Examiner’s telephone call to William Thomann. Applicants confirm that they requested a written office action rather than an Examiner’s Amendment.

Regarding the Examiner’s comment as to the meaning of “vertebrate,” Applicants acknowledge that the term “vertebrate” indicates as occurring in vertebrate species and that the derivatives and analogs of the present invention are derivatives and analogs of Delta proteins and nucleic acids found in vertebrate species.

With regard to the sequencing errors found in SEQ ID NO:23, Applicants

have canceled claims 106, 111 and 127 and have amended claims 99, 126 and 146 such that SEQ ID NO:23 is no longer referred to in the claims.

CONCLUSION

Applicants respectfully request that the above-made remarks of the present response be entered and made of record in the file history present application.

Applicants request that the Examiner call Adriane M. Antler at (212) 326-3630 if any questions or issues remain.

Respectfully submitted,

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Enclosures